

REMARKS

The non-final Office Action, mailed on November 13, 2003, re-opening the prosecution of this application, is hereby acknowledged.

The present invention relates to an optical symbology imager, including a focusing disk 94 having a series of different thickness optical positions 132, the thickness of these positions being varied to focus an objective lens 92 onto a charged coupled device (CCD) detector 93 during image capture. Since the CCD detector 93 contains 325,546 pixels, it was imperative to develop a device for minimizing the time it takes to focus the images by utilizing only a fraction of the pixels of the CCD detector 93. In operation, the CCD detector 93 generates image data at 494 lines, one line at a time, each line being 659 pixels long. The first 246 lines, instead of being digitized, which would require significant time, these lines are "dumped." It is important to note that these first 246 lines are not read and are not digitized at all which would require a relatively significant amount of time. The next ten lines would then be read, thereby halving the focusing time required.

The Examiner has rejected claims 25, 36, 40-43 and 49-51 under 35 USC §103(a) as being unpatentable over U.S. Patent 5,365,049 to Peng in view of the admitted prior art in applicant's application as well as U.S. Patent 5,563,658, issued to Parulski et al. This rejection is respectfully traversed.

Claim 25 is directed to an optical symbology imager including a CCD detector, a focusing apparatus and a microprocessor for controlling the focusing apparatus and operation of the CCD, so that the CCD performs image capture producing image data for each of a number of optical positions. The CCD would dispose of a first set of multiple lines at a first rate of speed during focusing and then would sample a second subsequent set of multiple lines at a second rate of speed less than the first rate of speed. The Examiner has rejected this claim utilizing the Peng and Parulski et al. references, as well as in view of the admitted prior art in the applicant's specification. The Examiner has indicated that while Peng fails

to teach the CCD disposing of a first set of multiple lines at a first rate of speed during focusing, this feature is shown in the Parulski et al. reference. It is important to note that in the column bridging columns 4 and 5, Parulski et al. states "Only a small number of lines in a center region 66 of the image are used to provide the focus determination input data. For the full frame sensor, the other lines 68 are quickly read from the image by continuously cycling the vertical clocks and the horizontal clocks." Therefore, while applicant agrees that the lines 66 of Figure 3 are read at a slower rate than are the lines 68, Parulski et al. specifically indicates that even lines 68 are read. This is in contradistinction to the present invention in which these lines are not read, but are merely dumped. This is reflected in page 14, lines 9-11 where it is indicated that the first 246 lines are not being digitized which would require a significant amount of time.

Applicant has amended claim 25 to amplify the language previously included in this claim indicating that the CCD would dispose of the first set of multiple lines. Claim 25 as now amended indicates that these first set of multiple lines are not read or digitized by the CCD. Since the Parulski patent specifically indicates that their first set of lines are "read" the focusing time would be greater than the focusing time of the present invention. It is noted that all of the additional claims of this application directly depend from claim 25. Therefore, it is believed that all of the claims do recite allowable subject matter.

The Examiner has rejected claim 27 under 35 USC §103(a) as being unpatentable over Peng as modified by the admitted prior art in view of the Parulski et al. reference and further in view of U.S. Patent 5,510,604 to England. This rejection is respectfully traversed.

Claim 27 directly depends upon claim 25. Since it is believed that claim 25 does recite patentable subject matter, it is also maintained that claim 27 also recites patentable subject matter. Consequently, reconsideration and withdrawal of this reference, as well as any additional rejections, are respectfully

requested.

It is believed that the present invention as now claimed is not anticipated or rendered obvious by the prior art cited by the Examiner nor known to the applicant. Therefore, reconsideration and allowance of this application are respectfully requested.

Respectfully submitted,



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